



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-1331; Directorate Identifier 2012-NE-44-AD; Amendment 39-17473; AD 2013-11-13]**

**RIN 2120-AA64**

**Airworthiness Directives; Rolls-Royce plc Turbojet Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Rolls-Royce plc (RR) Viper Mk. 601-22 turbojet engines. This AD requires reducing the life of certain critical parts. This AD was prompted by a review carried out by RR of the lives of these parts. We are issuing this AD to prevent failure of life-limited parts, damage to the engine, and damage to the airplane.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Defence Aerospace Communications at Rolls-Royce plc, P.O. Box 3, Gypsy Patch Lane, Filton, Bristol, BS347QE, United Kingdom; phone: 011-44-117-9791234; or email: [http://www.rolls-royce.com/contact/defence\\_team.jsp](http://www.rolls-royce.com/contact/defence_team.jsp). You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: Robert.Green@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the *Federal Register* on February 22, 2013 (78 FR 12255). That NPRM proposed to correct an unsafe condition for the specified products. The mandatory continuing airworthiness information states:

A review, carried out by Rolls-Royce, of the lives of critical parts of the Viper Mk. 601-22 engine, has resulted in reduced cyclic life limits for certain critical parts.

Operation of critical parts beyond these reduced cyclic life limits may result in part failure, possibly resulting in the release of high-

energy debris, which may cause damage to the aeroplane and/or injury to the occupants.

For the reasons described above, this AD requires implementation of the reduced cyclic life limits for the affected critical parts, i.e., replacement of each part before the applicable reduced life limit is exceeded, and replacement of those critical parts that have already exceeded the reduced cyclic life limits.

We are issuing this AD to prevent failure of life-limited parts, damage to the engine, and damage to the airplane.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

### **Request to Change the Identity of the Type Certificate (TC) Holder**

Roll-Royce plc requested that we identify the TC holder as Rolls-Royce plc rather than Rolls-Royce (1971) Limited, Bristol Engine Division.

We agree. We changed the AD to identify the TC holder as Rolls-Royce plc.

### **Request to Change the Contact Information for the TC Holder**

Rolls-Royce plc requested that we change the contact information used to request service information for Viper Mk. 601-22 turbojet engines.

We agree. We changed the contact information for requesting service information related to this AD to: Defence Aerospace Communications at Rolls-Royce plc, P.O. Box 3, Gypsy Patch Lane, Filton, Bristol, BS347QE, United Kingdom; phone: 011-44-117-9791234; or email: [http://www.rolls-royce.com/contact/defence\\_team.jsp](http://www.rolls-royce.com/contact/defence_team.jsp).

### **Conclusion**

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described

previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

### **Costs of Compliance**

We estimate that this AD will affect about 32 engines installed on airplanes of U.S. registry. We also estimate that it will take 0 hours per product to comply with this AD. The average labor rate is \$85 per hour. We are not requiring parts replacement, so parts cost is \$0. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$0.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new AD:

2013-11-13 **Rolls-Royce plc (formerly Rolls-Royce (1971) Limited, Bristol Engine Division)**: Amendment 39-17473; Docket No. FAA-2012-1331; Directorate Identifier 2012-NE-44-AD.

**(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Rolls-Royce plc (RR) Viper Mk. 601-22 turbojet engines.

**(d) Reason**

This AD was prompted by a review carried out by RR of the lives of certain critical parts. We are issuing this AD to prevent failure of life-limited parts, damage to the engine, and damage to the airplane.

**(e) Actions and Compliance**

Unless already done, do the following actions.

(1) After the effective date of this AD, remove the following parts before they reach their specified new, lower, life limits: compressor shaft, part number (P/N) V900766: 20,720 flight cycles since new (CSN); compressor rear stubshaft (center bearing hub), P/Ns V900007 and V900994: 9,600 flight CSN; combustion chamber outer casing, P/Ns V950013 and V950331: 32,000 flight CSN.

(2) After the effective date of this AD, do not install any part identified in paragraph (e)(1) of this AD into any engine, nor return any engine to service with the

parts identified in paragraph (e)(1) of this AD installed, if the part exceeds the new, lower, life limit specified in paragraph (e)(1) of this AD.

**(f) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(g) Related Information**

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: Robert.Green@faa.gov.

(2) Refer to European Aviation Safety Agency Airworthiness Directive 2012-0243 (Correction: November 13, 2012), dated November 12, 2012, and RR Alert Service Bulletin 72-A206, dated November 2012, for related information.

(3) For service information identified in this AD, contact Defence Aerospace Communications at Rolls-Royce plc, P.O. Box 3, Gypsy Patch Lane, Filton, Bristol, BS347QE, United Kingdom; phone: 011-44-117-9791234; or email: [http://www.rolls-royce.com/contact/defence\\_team.jsp](http://www.rolls-royce.com/contact/defence_team.jsp). You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

**(h) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on May 28, 2013.

Colleen M. D'Alessandro,  
Assistant Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-13012 Filed 06/07/2013 at 8:45 am; Publication Date: 06/10/2013]